

# CDM Federal Programs Corporation

May 27, 1988

*Comments due 6/10*

Rose Harvell  
Project Officer  
U.S. Environmental Protection Agency  
401 M Street, Room 2834  
Washington, D.C. 20460

1. New Morton  
LE # K11073217641  
FILE LOC: \_\_\_\_\_  
OTHER: \_\_\_\_\_

PROJECT: EPA CONTRACT NO.: 68-01-7331  
DOCUMENT NO.: T503-R01-EP-BZWD-1  
SUBJECT: Draft Report for Work Assignment 503  
Land Disposal Restriction Inspection  
Providence Chemical Division  
Whittaker Corporation  
Document No.: T503-R01-DR-BZWE-1

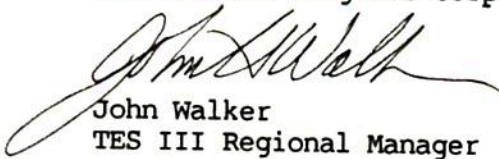
Dear Ms. Harvell:

Please find enclosed the draft report entitled, "Land Disposal Restriction Inspection, Providence Chemical Division, Whittaker Corporation," as partial fulfillment of the reporting requirements for this work assignment.

If you have any comments regarding this submittal, please contact Paige Embry of CDM Federal Programs Corporation at (617) 742-2659 within two weeks of receipt of this letter.

Sincerely,

CDM Federal Programs Corporation

  
John Walker  
TES III Regional Manager

PE:rf

Enclosure

cc: Geralyn Falco, EPA Primary Contact, RCRA Region I  
Kathy Castagna, EPA Regional Contact, RCRA Region I  
Lee Whitehurst, EPA HQ Coordinator, RCRA Region I  
Harry Butler, CDM Federal Programs Corporation Deputy Program Manager  
Michael P. Riley (letter only)

TAFØ - 4

# CDM Federal Programs Corporation

July 6, 1988

Rose Harvell  
Project Officer  
U.S. Environmental Protection Agency  
401 M Street, Room 2834  
Washington, D.C. 20460

PROJECT: EPA CONTRACT NO.: 68-01-7331  
DOCUMENT NO.: T503-R01-EP-CDXE-1  
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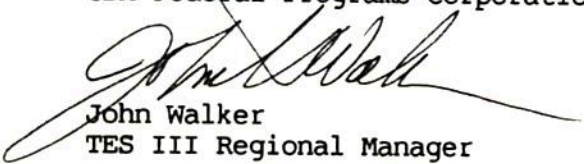
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Barbara Kuberski (letter only)

TAFØ - 4



Providence Chemicals Division  
King Philip Road  
Post Office Box 16069  
East Providence, Rhode Island 02916  
401-434-1770 Telex 92-7652

June 14, 1988

Ms. Geralyn P.M. Falco  
Waste Programs Section USEPA  
JFK Federal Building  
Boston, MA. 02203

Dear Ms. Falco:

Pursuant to your site inspection of our facility on 29 April, 1988, we have had an analysis performed on our wash solvent waste stream to determine its current status relative to the Landfill Restrictions Rule. A representative sample was consolidated from all of the drums of solvent held in our Accountable Waste Area on 27 May, 1988. A copy of the resulting analysis is attached herewith. You will note the low heavy-metals content.

If you have any further questions, please feel free to contact me.

**RECEIVED**

JUN 22 88

ME & VT WASTE  
MANAGEMENT BRANCH

Best Regards,

A handwritten signature in blue ink that reads 'Matthew J. Waite'.

Matthew J. Waite  
Business Manager  
Packaging Products

MJW/lnl  
Encl.



TO: M. WAITE  
PROVIDENCE  
FROM: J. ABRAMS  
WCRC

Jun 10, 1988

## WCRC ANALYTICAL REPORT

DIVISION REQUESTING WORK: PROVIDENCE DATE: 5/31/88

PROJECT#: PR- 0496- 88 CUSTOMER:

PROJECT NAME: WASH SOLVENT ANALYSIS

### WORK REQUESTED:

ANALYZE THIS SAMPLE FOR ALL ITEMS AS ON ATTACHED SHEET FROM 6/4/82.  
ALSO, PLEASE DETERMINE SPECIFIC LEVEL OF DEHP IN SAMPLE. SAMPLE WAS  
CONSOLIDATED FROM ALL DRUMS (12) HELD IN ACCOUNTABLE WASTE AREA ON  
5/27/88.

ORIGINATED BY: M. WAITE APPROVED BY: E. HOLZRICHTER

### WCRC USE ONLY

PROJECT ASSIGNED TO: ABRAMS DATE: 5/31/88

### STATUS/RESULTS:

WT. SOLIDS (TOTAL) = 48.4%, DISSOLVED SOLIDS = 48.2%, SUSPENDED SOLIDS = .2%,  
WT./GAL = 7.52#, SPECIFIC GRAVITY = .903, SETA FLASH PT. = 120°F, NO  
CHLORINATED SOLVENTS OR PCB'S DETECTED, DIDP WAS THE ONLY PLASTICIZER  
DETECTED. HEAVY METALS: Cr = 1.6 PPM, Pb = 28.6 PPM, Hg = NONE DETECTED,  
Ag = N.D., Cd = 2.1 PPM, Ba = 41.5 PPM, Se = N.D.

30 mg/l  
+ 100 mg/l  
22.9 mg/l  
+ 600 mg/l  
410 mg/l  
+ 100 mg/l

PROJECT COMPLETED: 6/10/88 MAN HOURS: CURRENT MO.: 19

CC: W. CLARK  
E. HOLZRICHTER  
FILE

TOTAL: 19

# CDM Federal Programs Corporation

July 6, 1988

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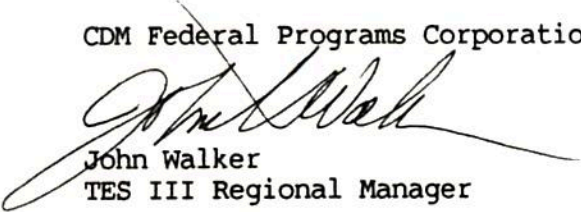
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TAFØ - 4

New Motion  
KID093214641  
FILE NO: R-1C  
OTHER: \_\_\_\_\_

FINAL REPORT  
LAND DISPOSAL RESTRICTION INSPECTION  
PROVIDENCE CHEMICAL DIVISION  
WHITTAKER CORPORATION

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Waste Programs Enforcement  
Washington, D.C. 20460

Work Assignment No.	:	503
EPA Region	:	I
Site No.	:	RID093214641
Contract No.	:	68-01-7331
CDM Federal Programs Corporation Document No.	:	T503-R01-FR-CDXD-1
Prepared By	:	CDM Federal Programs Corporation
Work Assignment Project Manager	:	Paige Embry
Telephone No.	:	(617) 742-2659
Primary Contact	:	Gerri Falco
Telephone Number	:	(617) 573-5778
Date Prepared	:	July 6, 1988

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## 1.0 SCOPE OF WORK

CDM Federal Programs Corporation (CDM FPC) received Work Assignment No. 503 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-01-7331 (TES III) to conduct Land Disposal Restriction (LDR) inspections at 27 RCRA facilities in EPA Region I including the Providence Chemical Division of Whittaker Corporation (Whittaker Corp.) in East Providence, Rhode Island.

The Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA), mandates that EPA must follow a strict schedule when evaluating hazardous wastes to determine which wastes should not be land disposed. Wastes cannot be land disposed unless they meet certain treatment standards. On November 7, 1986, EPA published the first phase of the LDR in the Federal Register (51 FR 40572) restricting land disposal of F001 to F005 solvent wastes and dioxins. However, restriction of land disposal of dioxins was delayed until November 8, 1988 due to a lack of treatment capacity. On July 8, 1987 the California List wastes (cyanides, PCBs, certain metals above specified concentrations in liquid hazardous wastes, liquid wastes with halogenated organic compounds concentrations between 1000 mg/l and 10,000 mg/l and wastes with a pH of less than or equal to two) were added to the restricted wastes. Other wastes will be added to the restricted list at certain specified intervals.

PRC Environmental Management, Inc., a TES III team member, will conduct 18 of the 27 LDR inspections. CDM FPC will conduct the remaining nine inspections. On April 29, 1988 CDM FPC inspected the Whittaker Corp. facility; Paige Embry performed the inspection accompanied by Michael Kulbersh of CDM FPC and GERALYN Falco of the EPA.

### 1.1 Facility Description

The Whittaker Corp. facility is located within the city limits of East Providence, Rhode Island. The mailing address, facility contact, responsible individual and EPA identification number follow:

Mailing Address:	Providence Chemicals Division, Whittaker Corp. King Philip Road East Providence, Rhode Island 02916-0698
Facility Contact:	Matthew Waite, Business Manager (401) 434-1770
Responsible Official:	Richard C. Knipp, Vice President-Operations King Philip Road East Providence, Rhode Island 02916-0698 (401) 434-1770
EPA ID No:	RID093214641



## 1.2 Inspection Procedures

### 1.2.1 Pre-Inspection

Before inspecting the Whittaker Corp. facility, CDM FPC personnel reviewed documents pertinent to the inspection. These documents were obtained from the EPA Region I office in Boston, Massachusetts and the Rhode Island Department of Environmental Management (RIDEM) located in Providence, Rhode Island. The documents reviewed include the following:

- o hazardous waste notification form (August 15, 1980),
- o hazardous waste permit application (March 9, 1982),
- o closure plan for the storage facility (March 18, 1985),
- o EPA preliminary assessment (November 27, 1985),
- o biennial hazardous waste report for 1985 (March 3, 1986),
- o initial screen (May, 1986),
- o RCRA technical assistance inspection report (June 10, 1985) and
- o RCRA correspondence.

### 1.2.2 On-site Inspection

On April 29, 1988 the CDM FPC inspectors and the EPA compliance officer from EPA Region I inspected the Providence Chemicals Division of the Whittaker Corporation. Listed below are the names, affiliations and phone numbers of those in attendance.

Geralyn Falco	EPA Region I Compliance Officer	(617) 573-5778
Paige Embry	CDM FPC Inspector	(617) 742-2659
Michael Kulbersh	CDM FPC Inspector	(617) 742-2659
Matthew Waite	Whittaker Corp. Business Manager	(401) 434-1770

Richard C. Knipp, Vice President - Operations, joined the inspection team for the plant tour.

According to Mr. Waite's description of facility operations and waste streams, Whittaker Corp. generates hazardous waste but no longer generates F-solvent waste or California List waste. CDM FPC completed the generator and California List checklists (included as Appendix A). CDM FPC also reviewed all hazardous waste manifests prepared since the Land Disposal Restrictions came into effect and inspected the drum storage area.

## 2.0 INSPECTION FINDINGS

### 2.1 Permit Status

The facility submitted a notification of hazardous waste activity on August 1, 1980 indicating that they generated and stored hazardous waste.

Whittaker Corp. submitted the closure plan for its storage operation on March 22, 1985. The plan was approved on April 17, 1985 and certified closed on May 9, 1986. The facility is presently a generator of hazardous waste.

### 2.2 Facility Operations and Waste Management

Whittaker Corp. makes a dispersion of polyvinyl chloride (PVC) in a plasticizer base by mixing PVC powder in a liquid plasticizer. Customers heat the liquid which converts it into a tough, flexible coating. It is used industrially for tool handles, etc. The company also has a section that manufactures gaskets for food product lids.

The 1985 biennial hazardous waste report for 1985 (for the calendar year ending December 31, 1985) indicates that Whittaker Corp. sent 6674 gallons of combustible liquid waste, N.O.S. (EPA hazardous waste no. D001) to Solvent Recovery Service of N.E. (EPA ID No. CTD009717604) for recovery and return of the recovered material.

Prior to closure, the primary waste streams generated at the facility were the following:

- o spent xylene, toluene, acetone or methyl ethyl ketone (MEK) from washing laboratory equipment;
- o solvent cleaning waste (Shell Cyclo Sol 53) which is predominantly cyclooctane, cyclononane and cyclodecane and may contain PVC resin, polyols, carbonates, plasticizers, barium sulfate or trace amounts of lead, cadmium, chromium or mercury;
- o empty metal drums which were declared hazardous because they once contained a 21% solution of di(phenylmercuric) dodecenyl succinate;
- o vinyl powder containing insecticide residues which is generated during the air treatment of stack emissions. The insecticides do not have specific EPA I.D. numbers but are "Naled" (1,2 dibromo-2,2 dichloroethylmethyl phosphate) and "Sendren" (2-[1-methylepoxy-] phenylmethyl carbamate).



### 2.2.1 Interviews

The inspector briefly described the purpose of the inspection and interviewed Mr. Waite about facility operations and procedures for handling F-solvent and California List waste.

Mr. Waite described the products that Whittaker Corp. manufactures. Since closure the waste streams generated by the facility have changed from those discussed above. Approximately 18 drums of Solvesso 100, which is equivalent to the Cyclo Sol 53 discussed above, are shipped three times a year. Mr. Waite indicated that the company does, on occasion, generate more than 1,000 kg/month and therefore, does not fall in the small quantity generator category. This solvent is used to clean the mixers each time a color change is noted. The solvent is changed approximately every month to six weeks and the barrels are immediately removed to the drum storage area.

The methyl ethyl ketone, acetone, toluene and xylene wastes generated in the laboratory prior to closure have been replaced by the same solvent, Solvesso 100, which is used to clean the mixers.

Whittaker Corp. still manufactures a dry blend PVC for one customer which contains the pesticides, "Naled" and "Sendren". According to Mr. Waite, the vinyl powder waste generated during this process is collected under a Rhode Island exemption for small quantity generators. A full barrel of waste has not been generated since closure in 1986.

Mercury is used as a catalyst in the generation of polyurethane. Whittaker Corp. utilized the mercury compound in making polyurethane used for sports flooring and automotive gaskets. Formerly, the empty barrels which had contained the mercury compound were treated as a hazardous waste because they once contained mercury. Mr. Waite indicated that these barrels are no longer considered hazardous waste because they receive four rinses. Two rinses with polyol removes about 99.9 % of the mercury. This polyol is used in the finished product. The barrels are rinsed two additional times with the solvent used to clean the mixers. This solvent is disposed of in the same way as the solvent used to clean the mixers.

### 2.2.2 On-site record review

CDM FPC reviewed the waste manifests prepared since the LDR came into effect as well as the waste analyses. The storage facility was closed and the generation of the F003 (acetone, xylene) and F005 (MEK) hazardous wastes stopped before the LDR rules came into effect.

The manifests indicted that all wastes shipped out was D001, designated waste combustible liquid, N.O.S. The estimated composition listed was 30 wt. % petroleum distillate (Solvesso 100), 24 wt. % plasticizer and 46 wt. % solids. Wastes were shipped to Solvent Recovery Service of N.E. (EPA ID No. CTD 009717604).



Whittaker Corporation's laboratory in California analyzed a conglomeration of the waste solvent in 1981 and 1982. Analyses of four batches of spent wash solvent on June 22, 1981 found from 2.7 ppm to 15.5 ppm lead, cadmium from not detectable to 0.30 ppm cadmium, chromium from not detectable to 24 ppm and mercury at 24 ppm, 40 ppm, 51 ppm and 144 ppm. The June 14, 1982 analysis found up to 40 ppm cadmium, up to 180 ppm chromium, up to 3750 ppm lead and up to 26 ppm mercury.

Since November of 1986 Whittaker Corp. has been supplying a notification form with its manifest indicating that it had no LDR waste. The blank form was supplied by Solvent Recovery Service of N.E.

### 2.3 OBSERVATIONS

During the plant walk-through CDM FPC screened with an HNu-101 for volatile organic vapors; the ambient background reading was 1 ppm. This number was not exceeded during the facility tour.

The hazardous waste storage area was in the same area that product was stored. The storage area was bermed; Mr. Waite said that it had been leak tested.

There were nine full drums in the storage area, all labeled D001, all dated, none exceeded the 90 day limit. One partially full drum was located in the bermed area and was dated March 15, 1986 it was labeled hazardous waste, N.O.S. Mr. Waite informed the inspectors that it contained the powder blend with the insecticides. Mr. Waite said that it should not be located in the bermed area and directed that it be returned to its satellite area. Under a Rhode Island exemption for small quantity generators, the drum is supposed to be kept in a satellite storage area.

One drum had plasticizer floating on top of the lid. All of the drums appeared to be in good shape. There were no satellite storage areas for the solvent; it is kept in the machinery until dirty then is removed, drummed and brought to the storage area.

### 3.0 COMPLIANCE EVALUATION

Although it appeared during the inspection that Whittaker Corp. did not generate any hazardous wastes regulated by the LDR rules, review of the information obtained indicates that Whittaker Corp. may be generating California List waste. This conclusion is uncertain because the last waste analysis occurred in 1982.

During the inspection CDM FPC asked Mr. Waite about the mercury concentrations noted in the 1981 waste analyses (24 ppm, 40 ppm, 51 ppm, 144 ppm) because they appeared to exceed the California List waste concentration of 20 mg/l.

Mr. Waite indicated that the analyses were in ppm and a conversion to mg/l was required; one must then take the density of the mercury into account and this would lower the mercury concentration to below the specified level. However, it is not the density of the element that needs to be taken into account but the density of the solution, which is approximately 1.0; therefore, the concentrations do not change, only the units.

Mr. Waite indicated in a telephone conversation on May 25, 1988 that the 1982 analyses are more applicable to the composition expected in the waste solvent today because Whittaker Corp. now only makes polyurethane for automotive gaskets, not sports flooring. Therefore, the quantity of polyurethane presently generated, and mercury compound utilized, is considerably less than in 1981.

The 1982 analyses exceeded the California List concentrations for mercury (20 mg/l) and lead (500 mg/l). The concentrations found in the 1982 analyses were 26 ppm mercury and 3750 ppm lead.

In the May 25, 1988 telephone conversation Mr. Waite indicated that he is having the solvent wastes analyzed. He also indicated that the mercury concentration specified on the notification forms, 65 ppm, is incorrect. He utilized an average of the analyses rather than merely the 1982 data that he indicates is now applicable.

### 3.1 Recommendations

CDM FPC recommends that EPA request a copy of the new waste analysis of the solvent that Mr. Waite indicated he was going to have done. It is possible that the 1982 analyses are no longer applicable and the facility is in compliance with the LDR rules. Using the 1982 data the facility does generate California List waste and is not indicating this on its notification form, and therefore, is not in compliance with 40 CFR Part 268.



Co. Name Whitaker Corp.

Inspector Ridge Embury Date 4/29/88

California List Waste - Generator Checklist

Waste Generated

1) Does the handler generate the following wastes?

a. Liquid hazardous wastes with cyanides  $\geq 1000$  mg/l  
\_\_\_\_\_ Y ☒ N

b. Liquid hazardous wastes with metals or compounds  $\geq$  :

arsenic	500 mg/l	_____	Y	_____	N
cadmium	1000 mg/l	_____	Y	<input checked="" type="checkbox"/>	N
chromium VI	500 mg/l	_____	Y	<input checked="" type="checkbox"/>	N
lead	500 mg/l	_____	Y	<input checked="" type="checkbox"/>	N
mercury	20 mg/l	<input checked="" type="checkbox"/>	Y	_____	N
nickel	134 mg/l	<input checked="" type="checkbox"/>	Y	_____	N
selenium	100 mg/l	_____	Y	<input checked="" type="checkbox"/>	N
thallium	130 mg/l	_____	Y	_____	N

c. Liquid hazardous wastes having a pH  $\leq 2$  ?  
\_\_\_\_\_ Y ☒ N

d. Liquid hazardous wastes containing PCBs  $\geq$   
50 ppm? \_\_\_\_\_ Y ☒ N  
500 ppm? \_\_\_\_\_ Y ☒ N

e. Liquid hazardous wastes that are primarily water  
and contain HOCs  $\geq 1000$  mg/l and  $\leq 10,000$  mg/l HOCs?  
\_\_\_\_\_ Y ☒ N

2) a. Paint Filter Liquids Test (PFLT method 9095)  
performed? \_\_\_\_\_ Y ☒ N

b. Representative chemical and physical analyses ?  
\_\_\_\_\_ ☒ Y \_\_\_\_\_ N

3) Waste solidified using an absorbent? \_\_\_\_\_ Y ☒ N

a. Absorbent used? \_\_\_\_\_

b. Which waste? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## 4) Is waste restricted based on:

- a. Knowledge of wastes  
b. Testing

<u>Y</u>	<u>✓</u>	<u>N</u>
<u>✓</u>	<u>Y</u>	<u>N</u>

List method Chemical analyses of the drummed solvent  
water by the Colton, CA laboratory, of Whittaker Corp.

- c. List constituent and concentration level which exceeded prohibition levels. Using the 1982

Analyses - lead 3750 ppm, mercury 26 ppm

If knowledge, note how this is adequate: \_\_\_\_\_

Treatment

- 5) On-site or off-site <sup>reclamation</sup> ~~treatment~~? No No treatment

Identify off-site facility \_\_\_\_\_

- 6) Notification to <sup>reclamation</sup> ~~treatment~~ facility with:

- (i) EPA waste number?  
(ii) Specified treatment standard?  
(iii) Manifest number?  
(iv) Waste analysis data, if available?

<u>✓</u>	<u>Y</u>	<u>✓</u>	<u>N</u>
<u>✓</u>	<u>Y</u>	<u>✓</u>	<u>N</u>
<u>✓</u>	<u>Y</u>	<u>✓</u>	<u>N</u>
<u>✓</u>	<u>Y</u>	<u>✓</u>	<u>N</u>

**Disposal**

7) On-site or off-site disposal? Material is recovered

Identify off-site disposal facility Solvent Recovery

Service of N.E.

8) Notification and certification to the disposal facility with:

(i) EPA hazardous waste number?        Y        N  
 (ii) Manifest number?        Y        N  
 (iii) Waste Analysis Data, if available?        Y        N  
 (iv) Specified treatment standard?        Y        N  
 (v) Certification that waste passed PFLT  
 (non-liquid), or does not exceed  
 specified prohibition levels?        Y        N

N/A

**Storage**

9) Storage greater than 1 year for restricted wastes containing PCBs.        Y   ✓   N

10) Storage period for restricted wastes:

**Variances/Extensions**

11) Does facility handle any of the following waste:

- a. (i) Waste containing HOC  $\geq$  1000 mg/kg (non-liquid hazardous waste) \_\_\_\_\_Y ☒N
- (ii) Liquid waste containing HOC  $\geq$  1000 mg/l except wastes in 1(e) \_\_\_\_\_Y ☒N

If yes, answer 11(b) and (c).

- b. Is any waste listed in 11(a) disposed of in a landfill or surface impoundment? \_\_\_\_\_Y \_\_\_\_\_N
- c. In compliance with double liner requirements [section 268.5(h)(2)]: \_\_\_\_\_Y \_\_\_\_\_N

In compliance with ground water monitoring requirements; \_\_\_\_\_Y \_\_\_\_\_N

12) Other Variances/Extensions/Petitions \_\_\_\_\_

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Inspector: Page Embury

Date: 4/29/88

RCRA LAND RESTRICTION F-SOLVENT  
GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

Providence Chemicals Div. Whitaker Corp King Phillip Rd.  
A. Handler Name B. Street (or other identifier)

East Providence RI 02916  
C. City D. State E. Zip Code F. County Name

Produces vinyl plastisols & 2 component polyurethane elastomers  
G. Nature of Business; Identification of Operations

RID 093214641  
H. EPA ID #

Matthew Waite  
I. Handler Contact (Name and Phone Number)

II. GENERATOR COMPLIANCE

A. F-Solvent Identification

Waste Handled	Specific Wastes
F001 <u>Y</u> <u>✓</u> <u>N</u>	_____
F002 <u>Y</u> <u>✓</u> <u>N</u>	_____
F003 <u>Y</u> <u>✓</u> <u>N</u>	_____

If an F003 wastestream listed solely for ignitability has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic?

Y N

F004 <u>Y</u> <u>✓</u> <u>N</u>	_____
F005 <u>Y</u> <u>✓</u> <u>N</u>	_____

See Appendix A for list of F-Solvent wastes. Note concerns below:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B. BDAT Treatability Group -  
Treatment Standards Identification

- 268.41 1. The generator correctly determines the appropriate treatability group of the waste (Wastewaters containing solvents, pharmaceutical wastewater containing spent methylene chloride, all other special solvent wastes).

\_\_\_\_\_ Y ☒ N

What treatability group is waste?

\_\_\_\_\_

\_\_\_\_\_

C. Waste Analysis

- 268.7(a) 1. Generator determines whether the waste exceeds treatment standards based on:

a. Knowledge of wastes \_\_\_\_\_ Y \_\_\_\_\_ N

b. TCLP \_\_\_\_\_ Y \_\_\_\_\_ N

c. Other (specify) \_\_\_\_\_

If knowledge, note adequacy:

\_\_\_\_\_

Date of last TCLP conducted \_\_\_\_\_

Frequency \_\_\_\_\_

Results \_\_\_\_\_

Problems \_\_\_\_\_

- d. Wastes tested using TCLP when a process or wastestream changed.

\_\_\_\_\_ Y \_\_\_\_\_ N

268.7(a)  
(2)

2. F-solvent wastes exceed applicable treatment standards upon generation? Y N Some

Explain \_\_\_\_\_  
\_\_\_\_\_

268.3

3. Dilution process used \_\_\_\_\_

D. Management

1. Onsite management

- a. F-solvent wastes managed onsite Y ✓ N

b. Restricted F-wastes:

treated \_\_\_\_\_ how? \_\_\_\_\_

stored \_\_\_\_\_ how? \_\_\_\_\_

disposed \_\_\_\_\_ how? \_\_\_\_\_

where disposed? \_\_\_\_\_  
\_\_\_\_\_

Note: TSDF Checklist must be completed if treatment, storage or disposal of restricted wastes was conducted.

2. Offsite Management

268.7(a)  
(1)

- a. For restricted F-Solvent wastes, generator provides treatment facility notification including:

(i) EPA waste number Y N

(ii) Applicable treatment standard? Y N

(iii) Manifest number Y N

(iv) Waste analysis data, if available? Y N

*Facility notification  
supplies though they  
don't believe they  
generate LDR waste*



Identify offsite treatment facilities SRS Wash Solu

Powder blend <sup>least time</sup> Ashland Chem used during closure

b. Treatment standard variance Y N

268.7(a)  
(2)

c. For F-solvent wastes meeting treatment standards, generator provides the disposal facility notification including:

(i) EPA Hazardous waste number Y N

(ii) Applicable treatment standard Y N

(iii) Manifest number Y N

(iv) Waste analysis data, if available Y N

(v) Certification that waste meets treatment standards Y N

Identify land disposal facilities receiving the BDAT certified wastes \_\_\_\_\_

d. Is waste subject to:

268.30 \* nationwide extension? Y ✓ N

268.5 \* case-by-case extension? Y ✓ N

Expiration date \_\_\_\_\_

268.6 \* no-migration petition? Y ✓ N

Date approved \_\_\_\_\_

#### E. Storage of F-Solvent Waste

268.50 (a)  
(1)

1. Storage of wastes for  $\geq 90$  days (after variance 180/270 days for SQG).

Y ✓ N

Does facility operate as a TSD?

\_\_\_\_Y\_\_\_\_☒N

If yes, TSDF Checklist must be completed.

F. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes?

\_\_\_\_Y\_\_\_\_☒N

If yes, list type of treatment unit and processes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

If the residuals from a RCRA-exempt treatment unit are above the treatment standards, the owner/operator is considered a generator of restricted waste. The inspector should determine whether the generator requirements, particularly waste identification requirements, have been met for the treatment residuals.



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

75 Davis Street  
Providence, R.I. 02908

Letter of Deficiency  
under the  
Hazardous Waste Management Act

22 April 1985

Mr. Matthew J. Waite  
Technical Director  
Providence Chemicals Division  
Whittaker Corporation  
King Phillip Road  
East Providence, RI 02914

Dear Mr. Waite:

On Thursday, <sup>13</sup>16 April 1985 personnel from this Department conducted an inspection of your company in order to determine your compliance with regulations promulgated pursuant to the Rhode Island Hazardous Waste Management Act of 1978.

As a result of the inspection, it was determined that the Providence Chemicals Division of Whittaker Corporation is in violation of the following Hazardous Waste Treatment and Storage Regulation:

Financial Requirements

The facility owner or operator must meet the financial requirements of 40 CFR 265 Subpart H, specifically 40 CFR 265.147. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs (Rule 9.17).

A copy of the current Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance should be submitted to the Division of Air and Hazardous Materials by 31 May 1985.

Failure to correct the aforementioned violations or to submit a Request for an Extension for Compliance will automatically result in the issuance of a Notice of Violation and Order. Enforcement actions resulting from continued non-compliance specify a maximum fine of \$10,000 per day and/or five (5) years imprisonment.

Once I have received this Certificate of Insurance, I will be able to issue Whittaker/Providence Chemicals Division a Letter of Compliance.

Also, thank you for the information concerning the Rhode Island Association of Environmental Management.

Sincerely,

A handwritten signature in cursive script that reads "Julie A. Miller".

Julie A. Miller  
Engineer  
Division of Air and Hazardous  
Materials

JAM:jlq

cc: Gabe Crognale



## RCRA TECHNICAL ASSISTANCE INSPECTION REPORT

### I. General Information:

- A. Facility Name: Providence Chemicals Division  
Whittaker Corporation  
P.O. Box 16069  
King Philip Road  
East Providence, Rhode Island 02916-0698
- B. EPA I.D. Number: RID093214641
- C. Date of TAI: June 10, 1985 *44 6-24-85*
- D. Participants: Andrew Hoffman - EPA  
Karen Salomon - EPA  
Matthew Waite - Whittaker (Business Manager)

### II. General Discussion:

The Providence Chemicals Division of Whittaker Corporation produces 1) vinyl plastisols and 2) 2 component poly urethane elastomers. To do this, the company utilizes a three step operation: first, the resin and plasticizer (raw materials) are blended in a mixer; second, the mixture is vacuum treated to remove any air; third, it is filtered to remove any lumps or other debris.

Spent cleaning solvent is the largest volume of hazardous waste produced on-site. The solvent is used to clean the mixers each time a color change is made. The procedure involves pumping the solvent up into the tank and allowing it to flow back down to a collection drum where it is recirculated back into the tank. 2000 gal/yr (20,000 lbs/yr) are produced. Solvents Recovery Service picks up this waste and recycles it.

Vinyl powder which contains insecticide residues is produced from the air treatment of the stack emissions. 45 gallons/yr. are produced and ultimately incinerated off site.

Empty drums which contain residue of a mercury containing compound are considered to be hazardous since the residue is a Rhode Island acutely hazardous waste. 10 drums/yr are sent offsite to be crushed and then landfilled.

The Part A application lists several other spill and one-time-only wastes.

The facility originally notified as a storage facility, but has since decided to revert to generator status. The closure plan was approved and published on April 17, 1985. Since no comments were received, the company will begin closure on September 30, 1985.

### III. SWMU's Identified:

- A. Old Drum Storage Area - The company previously stored hazardous waste in the corner of the building. This area was approximately 2500 ft<sup>2</sup> and had no containment except for the walls of the entire warehouse. R.I. DEM therefore required that a new storage area be built.
- B. Present Drum Storage Area - Hazardous waste is now stored in a bermed area of approximately 1600 ft<sup>2</sup> in the middle of the building.
- C. Tank #5 - Spent Solvent is poured into this tank just before SRS comes to pick it up. This makes it easier SRS to pump the fluid from the tank into a bulk storage truck.

### IV. Units Identified

- A. Tank Area #1 - 8,6000-gallon suspended tanks are lined up in the basement and contain the raw material resins and plasticizers. The area is surrounded by a concrete berm with a cement floor.
- B. Tank Area #2 - 5,6000 gallon above ground tanks are situated outside the building. They are standing on end on a cement pad with no containment. Any leaks would flow undeterred to the surrounding landscape.

No releases have been known to occur in either of these areas.

## V. Site Observations

Three areas around the facility show areas where some sort of contamination occurred.

- A. Adjacent to the building at the southeast end of the plant - black soil and building wall discoloration. (A cement cover was next to this spot which resembled the cover to an underground tank. Mr. Waite did not know what it was.)
- B. Adjacent to the 5 outdoor tanks at the south west side of the plant - black soil discoloration (possibly truck oil spills).
- C. Adjacent to an old loading dock at the western end of the plant - black soil discoloration.

While conducting our tour of the facility, we were able to watch the solvent cleaning operation of one of the mixers. At the time, the recirculation pump was leaking and considerable amounts of solvent were spilling onto the cement floor.

Under another mixer, an oily substance was dripping through the ceiling to the floor. Absorbant was spread around the floor to catch the leak.

## VI. Future EPA Involvement

Following receipt of the company's response to the 3007 information request letter, conduct the Preliminary Assessment.